We claim:

- 1. An isolated and purified homozygous securin-defective human cell line.
- 2. The cell line of claim 1 which is a tumor cell line.
- 3. The cell line of claim 1 which is a colon cell line.
- 4. The cell line of claim 1 which is a colon tumor cell line.
- 5. A pair of isogenic cell lines in which a first cell line is homozygous securin-defective and a second cell line is securin-proficient.
- 6. The cell lines of claim 5 which are tumor cell lines.
- 7. The cell lines of claim 5 which are colon cell lines.
- 8. The cell lines of claim 5 which are colon tumor cell lines.
- 9. The pair of cell lines of claim 5 which are provided in a single divided container.
- 10. A method of screening compounds to identify potential anti-cancer agents, comprising:

contacting a test compound with each of the two isogenic cell lines of claim 5; and

identifying as a potential anti-cancer agent a test compound which preferentially inhibits growth of the first cell line relative to the second cell line.

- 11. The method of claim 10 wherein the ratio of inhibition is at least 2:1.
- 12. The method of claim 10 wherein the ratio of inhibition is at least 5:1.
- 13. The method of claim 10 wherein the ratio of inhibition is at least 10:1.
- 14. The method of claim 10 wherein the ratio of inhibition is at least 20:1.
- 15. The method of claim 10 wherein the ratio of inhibition is at least 50:1.

- 16. The method of claim 10 wherein the cell lines are in culture when contacted with the test compound.
- 17. The method of claim 10 wherein the cell lines are in xenografts when contacted with the test compound.
- 18. The method of claim 10 wherein the test compound preferentially kills the first cell line relative to the second cell line.